

Case Docket No.: \_\_\_\_\_

ASSISTANT COMMISSIONER FOR PATENTS

FEE - Patent Application

Washington, D. C. 20231

Date: November 14, 2000

In regards to the application of: **Adam Coyle**

Serial No.: \_\_\_\_\_

FOR: **RELOADABLE DEBIT CARD SYSTEM AND METHOD**

Sir:

Transmitted herewith for filing are the following:

Enclosed are:

☒ Patent Application (\_\_\_ pgs.) and Drawings (\_\_\_ pgs)  
☐ Information Disclosure Statement and PTO 1449  
☒ Declaration and Power of Attorney (signed)  
☐ Verification of Small Entity Status by Inventor (signed)  
☒ Assignment Agreement (signed)  
☒ The filing fee has been calculated as shown below:

				SMALL ENTITY		OTHER THAN A SMALL ENTITY
FOR	NO. FILED	NO. EXTRA	RATE	FEE	RATE	FEE
BASIC FEE	*****	*****	****	\$ 355.00	or ****	\$ 710
TOTAL CLAIMS	_____ - 20 = _____		x 9=	\$ _____	or x 18=	\$ _____
INDEP. CLAIMS	_____ - 3 = _____		x40=	\$ _____	or x80=	\$ _____
MULTIPLE DEPENDENT CLAIM(S) PRESENTED	_____		+135	\$ 0	or +270=	\$ _____
			TOTAL	\$ _____	or	TOTAL \$ 710.00

☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 12-1660. A duplicate copy of this sheet is attached.

☒ Our Check No. 337480 is also enclosed to cover, among other items, the above filing fee.

Respectfully submitted,

SHUGHART THOMSON &amp; KILROY, P.C.

BY

*Mark Brown*

Mark E. Brown  
 Reg. No. 30,361  
 Attorney for Applicant

120 West 12th Street  
 Kansas City, Missouri 64105  
 Telephone: (816) 421-3355

## 1

## 2

## 3

4

## 6

7

3

10

1 The cardholders are responsible for paying these balances pursuant to the terms and  
2 conditions of the credit card agreements.

3 Debit cards, on the other hand, are used for spending funds which have been pre-  
4 deposited in cardholders' accounts. They tend to operate much like checking accounts  
5 because consumers generally cannot exceed predetermined limits based on their previous  
6 deposits with the issuing institutions.

7 Various systems and methods have previously been proposed for providing  
8 consumers with the convenience of credit/debit cards with certain use restrictions. For  
9 example, the Levine et al. U.S. Patent No. 5,477,038 discloses a method and apparatus for  
10 distributing currency using debit cards. Special-purpose cards have also been proposed  
11 and include pre-paid telephone calling cards. An example is shown in the Stimson et al.  
12 U.S. Patent No. 5,511,114. The Stimson et al. U.S. Patents No. 5,577,109 and No.  
13 5,721,768 also show pre-paid (i.e., debit) cards, which are designed for general purchases.

14 Debit cards are also used for obtaining cash from pre-funded accounts. The  
15 Cucinotta et al. U.S. Patent No. 5,663,546 discloses an example of such a card. The  
16 cardholder can remain anonymous whereby cash transfers can be made confidentially. The  
17 global computer network ("Internet") has been utilized for loading debit cards, which can  
18 then be used for making purchases over the global computer network. An example of  
19 such a system and architecture is shown in the Davis et al. U.S. Patent No. 6,105,008.

20

1 Other types of debit cards include “gift” cards, which are typically not reloadable.  
2 Gift cards are available in variations which permit cash to be dispensed and in other  
3 variations which are restricted to purchases of goods and services. For example, Western  
4 Union offers gift cards for dispensing cash to card holders, who can remain anonymous.

5 Heretofore there has not been available a reloadable debit card system and method  
6 for purchasing goods and services with the advantages and features of the present  
7 invention.

#### 8 9 **Summary of the Invention**

10 In the practice of the present invention, a reloadable, non-cash dispensing debit  
11 card system is provided. The system includes an issuing institution with a main account.  
12 Multiple sub-accounts are established under the main account and are associated with  
13 respective debit cards issued by the issuing institution. The debit cards are pre-assigned  
14 sub-account numbers and incremental face values. The face values can be determined by a  
15 cardholder/purchaser within a predetermined incremental value structure allowing the face  
16 value of the card to be adjusted in predetermined increments. The cards are distributed to  
17 retail (POS) establishments for sale to cardholders/purchasers who can use them for  
18 purchasing goods and services, but not for cash redemption. Optionally, the cards can be  
19 used to purchase negotiable instruments, such as money orders.

1 In the practice of the method of the present invention, an issuing institution  
2 establishes a main account with sub-accounts which are assigned identifying numbers  
3 associated with individual debit cards. The cards are distributed to retail (POS) merchants  
4 and sold to customers/cardholders. Goods and services are purchased with the cards,  
5 which can be reloaded with additional value in predetermined increments.  
6

7 **Objects and Advantages of the Invention**

8 The principal objects and advantages of the present invention include: providing a  
9 reloadable debit card system and method; providing a debit card for such a system;  
10 providing such a card which can be used anonymously; providing such a card which can be  
11 reloaded in predetermined increments; providing such a card which can be restricted to  
12 goods and services purchases; providing such a card which can be preprinted for  
13 distribution to retail (POS) establishments for resale; providing such a card which can be  
14 used for the purchase of goods and services throughout a network of subscribing  
15 merchants; providing a method of purchasing goods and services with reloadable debit  
16 cards; providing such a method wherein the cards are preprinted; providing such a method  
17 wherein the cards are reloadable in incremental value amounts; and providing a card-based  
18 purchasing system and method which are efficient in operation, secure and particularly  
19 well adapted for the proposed uses thereof.  
20

Other objects and advantages of the present invention will become apparent from the following description, wherein are set forth exemplary embodiments thereof.

### **Brief Description of the Drawings**

**Fig. 1** is a schematic block diagram of a reloadable debit card system embodying the present invention.

**Fig. 2** is a flow diagram of a reloadable debit card method embodying the present invention.

### **Detailed Description of the Preferred Embodiments**

#### **I. Introduction and Environment**

As required, detailed embodiments of the present invention are disclosed herein; however, it is to be understood that the disclosed embodiments are merely exemplary of the invention, which may be embodied in various forms. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art to variously employ the present invention in virtually any appropriately detailed structure.

Referring to the drawings in more detail, the reference numeral **2** generally designates a system for purchasing goods and services with a reloadable (value-added) debit card **10**. The system **2** includes a card-issuing institution **4**. The institution **4** can



1 the institution **4** and represent an aggregate of the sub-accounts **12** in a particular system  
 2 **2.** Each card **10** is imprinted with a sub-account identifier **18**, such as a number or  
 3 combination of alpha and/or numeric characters or digits, which are associated with a  
 4 respective sub-account **12**. The printed identifier **18** can be selectively covered by a  
 5 concealing strip **20**, which can be in place, for example, prior to purchase and removed by  
 6 the sub-account holder **11** prior to use. In this manner security can be provided whereby  
 7 the identifier **18** is kept confidential.

8 Each card **10** is also equipped with a magnetic strip **22** for recording the identifier  
 9 **18** which can be detected by a magnetic card reader **24** associated with a POS  
 10 establishment **8**. The card reader **24** is connected to a POS computer terminal **26**, which  
 11 is linked (e.g. hardwired, via internet, wirelessly, etc.) to the institution host computer **6**.  
 12 Transactions can thus be submitted essentially instantaneously to the institution **4** for  
 13 approval or rejection, depending upon the account balance in the sub-account **12**.

14 Security is provided for the system **2** by employing several procedures. Firstly, the  
 15 use of the card **10** can be limited to payment for goods and/or services, which can broadly  
 16 include negotiable instruments such as money orders, cashiers checks, travelers checks,  
 17 etc., made payable to the sub-account holder. By preventing the use of the card **10** to  
 18 directly acquire cash, the cards **10** are less inviting for theft, misuse, etc. The concealed  
 19 identifier **18** also provides security, and the card **10** can be imprinted with a suitable legend  
 20 **28** suggesting that the identifier **18** be kept confidential and that the card not be accepted



with a pre-exposed identifier **18**, which might indicate that security for the card **10** had been compromised. Still further, the POS establishment **8** can require the use of a magnetic card reader **24** for insuring that the card **10** must physically be present for a transaction to be conducted. Still further, a PIN could be assigned to each sub-account **12**, which PIN would not appear on the card **10** but would be known to the sub-account holder **11** for verification of his or her card ownership and hence authorization to conclude the transaction.

## **II. VALUE-ADDED CARD TRANSACTION METHOD**

**Fig. 2** is a flow chart depicting an exemplary debit or value-added card transaction method embodying the present invention. The method commences at start **100** and proceeds to an establish main account by card-issuing institution step **102**. The main account is configured with multiple sub-accounts established at **104** and each sub-account **12** is assigned an account number at **106**. Incremental face values for the cards **10** are determined at **107**. For example, the cards **10** can have predetermined incremental face values of \$5, \$10, etc. Cards **10** are printed with their sub-account numbers at **108**.

The cards **10** can optionally be provided with magnetic strips **22** at decision block **110** which, if answered affirmatively, results in the cards **10** being encoded with their sub-account numbers at **111**. If the cards do not have magnetic strips **22** (negative branch from decision block **110**), or after the sub-account numbers are encoded at **111**, the



1 proceeds to an end block **134**. If the sub-account balance is insufficient to cover the  
2 transaction and any fees associated therewith (negative branch from “Sufficient Funds?”  
3 decision block **130**), the method proceeds to a “Reload Card?” decision block at **136**. The  
4 affirmative branch from the decision block **136** leads to the credit sub-account step at **114**.  
5 Otherwise (negative branch from “Reload Card?” decision block **136**) the method  
6 proceeds to the end block **134**.

7 It will be appreciated that the card **10** can be utilized indefinitely by simply adding  
8 to its incremental value as needed at **116**. Optionally, the affirmative branch from a  
9 “Purchase Negotiable Instrument?” decision block **138** provides for payment of all or part  
10 of the entire value of the card (after deducting transaction fees). Payment can be made in  
11 the form of a negotiable instrument, such as a money order, cashiers check, etc. made  
12 payable to the sub-account holder **11**. The sub-account holder **11** can present the  
13 negotiable instrument for cashing same. Such a negotiable instrument purchase can be  
14 handled like any other goods or services purchase with the card **10**. The negative branch  
15 from the “Purchase Negotiable Instrument?” decision block **138** leads to the end block  
16 **140**.

17 From a reading of the description above pertaining to the disclosed embodiments  
18 of the present invention, modifications and variations thereto may become apparent to  
19 those skilled in the art. Other alternatives and variations may also become apparent to  
20 those of ordinary skill in the art upon a close examination of this specification in view of

1 the drawings. It should be appreciated that many features and aspects of the present  
2 invention were described above by way of example only and are therefore not intended to  
3 be interpreted as required or essential elements of the invention. Any elements of the  
4 invention that are required or essential would have been explicitly indicated to be so, for  
5 example by describing that the element “must” be included. Therefore, the scope of the  
6 present invention is to be limited only by the following appended claims.

7

## CLAIMS

What is claimed and desired to be secured by Letters Patent is as follows:

1. A stored-value card system, which comprises:
  - a card issuing institution;
  - a point-of-sale retail establishment authorized by the issuing institution to sell the cards;
  - a card identifier associated with each card and assigned thereto by the issuing institution;
  - a reloadable value associated with each card and representing a purchase price thereof, the purchase price being received by the point-of-sale establishment and credited to the card by the issuing institution;
  - a sub-account associated with each card and identified by the card identifier; and
  - said card being usable for purchases by presenting said card at a point-of-sale establishment whereby said sub-account is debited.
2. The system according to claim 1 wherein said cards can be used to purchase negotiable instruments from point-of-sale establishments.
3. The system according to claim 2 wherein said cards can be used to acquire money orders from point-of-sale establishments.
4. The system according to claim 1 wherein said cards are limited to usage for

purchases.

5. The system according to claim 1 wherein said card values are not redeemable for cash.
6. The system according to claim 1 wherein each card includes:  
the card identifier being printed on the card and selectively concealed by a removable concealing strip attached to the card.
7. The system according to claim 1 which includes:  
a magnetic strip on each card, the card identifier being encoded on the magnetic strip.
8. The system according to claim 1 which includes:  
a reader at a point-of-sale retail establishment for reading the card identifiers and thereby verifying the sub-account balances.
9. The system according to claim 1 which includes:  
a network comprising multiple point-of-sale establishments which accept said card for the purchase of goods and services.
10. A method of purchasing goods and services in transactions utilizing value-added cards, which method comprises the steps of:  
establishing a master account for value-added cards at a card-issuing institution;  
establishing a plurality of sub-accounts of said master account at said institution;  
preprinting a plurality of value-added cards;

- issuing said cards to a point-of-sale retail establishment;
  - pre-assigning sub-account identifiers to said cards;
  - selling the cards at the point-of-sale establishment to retail customers/sub-account holders;
  - crediting the sub-accounts associated with said cards with initial values corresponding to the purchase amounts thereof;
  - making purchases with said cards by providing the cards to merchants; and
  - debiting the respective sub-accounts in the amounts of said purchases.
11. The method of claim 10, which includes the additional step of reloading said cards by purchasing additional values therefor in the form of credits to said sub-accounts.
  12. The method according to claim 11, wherein said initial values and said subsequent added values correspond to incremental amounts predetermined by said issuing institution.
  13. The method according to claim 10, which includes the additional step of issuing a negotiable instrument to a sub-account holder and debiting the corresponding sub-account a comparable amount.
  14. The method of claim 13, which includes the additional step of the sub-account holder purchasing a money order with the card.
  15. The method according to claim 10, which includes the additional step of providing a numerical identifier for said sub-account.

16. The method of claim 10, which includes the additional steps of:  
concealing the identifier prior to purchase of a respective card; and  
revealing the identifier by the sub-account holder after purchase of a respective card.
17. The method of claim 10, which includes the additional steps of:  
transmitting to the issuing institution a transaction authorization request, including an amount of the transaction and a respective sub-account identifier; and  
authorizing the transaction if sufficient funds are available in the sub-account.
18. The method of claim 11, which includes the additional steps of:  
providing a computer terminal at the point-of-sale establishment; and  
providing a computer terminal at the card-issuing institution linked to the point-of-sale computer terminal.
19. The method of claim 10, which includes the additional steps of:  
providing magnetic strips on said cards;  
encoding the identifiers on the magnetic strips;  
providing magnetic card readers at the point-of-sale establishments;  
reading the identifiers at the point-of-sale establishments with the card readers from the magnetic strips; and  
transmitting the identifiers from the point-of-sale establishments to the card-issuing institution.



20. A method of purchasing goods and services in transactions utilizing value-added cards, which method comprises the steps of:

establishing a master account for value-added cards at a card-issuing institution;

establishing a plurality of sub-accounts of said master account at said institution;

preprinting a plurality of value-added cards;

issuing said cards to a point-of-sale retail establishment;

pre-assigning sub-account identifiers to said cards;

selling the cards at the point-of-sale establishment to retail customers/sub-account holders;

crediting the sub-accounts associated with said cards with initial values corresponding to the purchase amounts thereof;

making purchases with said cards by providing the cards to merchants;

debiting the respective sub-accounts in the amounts of said purchases;

reloading said cards by purchasing additional values therefor in the form of credits to said sub-accounts;

said initial values and said subsequent added values corresponding to incremental amounts predetermined by said issuing institution;

issuing negotiable instruments to sub-account holders and debiting the corresponding sub-accounts comparable amounts;

providing a numerical identifier for each said sub-account;

concealing the identifiers prior to purchase of the respective cards;

revealing the identifiers by the subaccount holders after purchases of respective cards;

transmitting to the issuing institution transaction authorization requests, including amounts of the transactions and respective sub-account identifiers;

determining if sufficient funds are available in the respective sub-accounts;

authorizing the transactions if sufficient funds are available in the sub-accounts;

providing reload options for the card holders in the event insufficient funds are available in the sub-accounts;

providing computer terminals at the point-of-sale establishments;

providing a computer terminal at the card-issuing institution linked to the point-of-sale computer terminals;

providing magnetic strips on said cards;

including the identifiers on the magnetic strips;

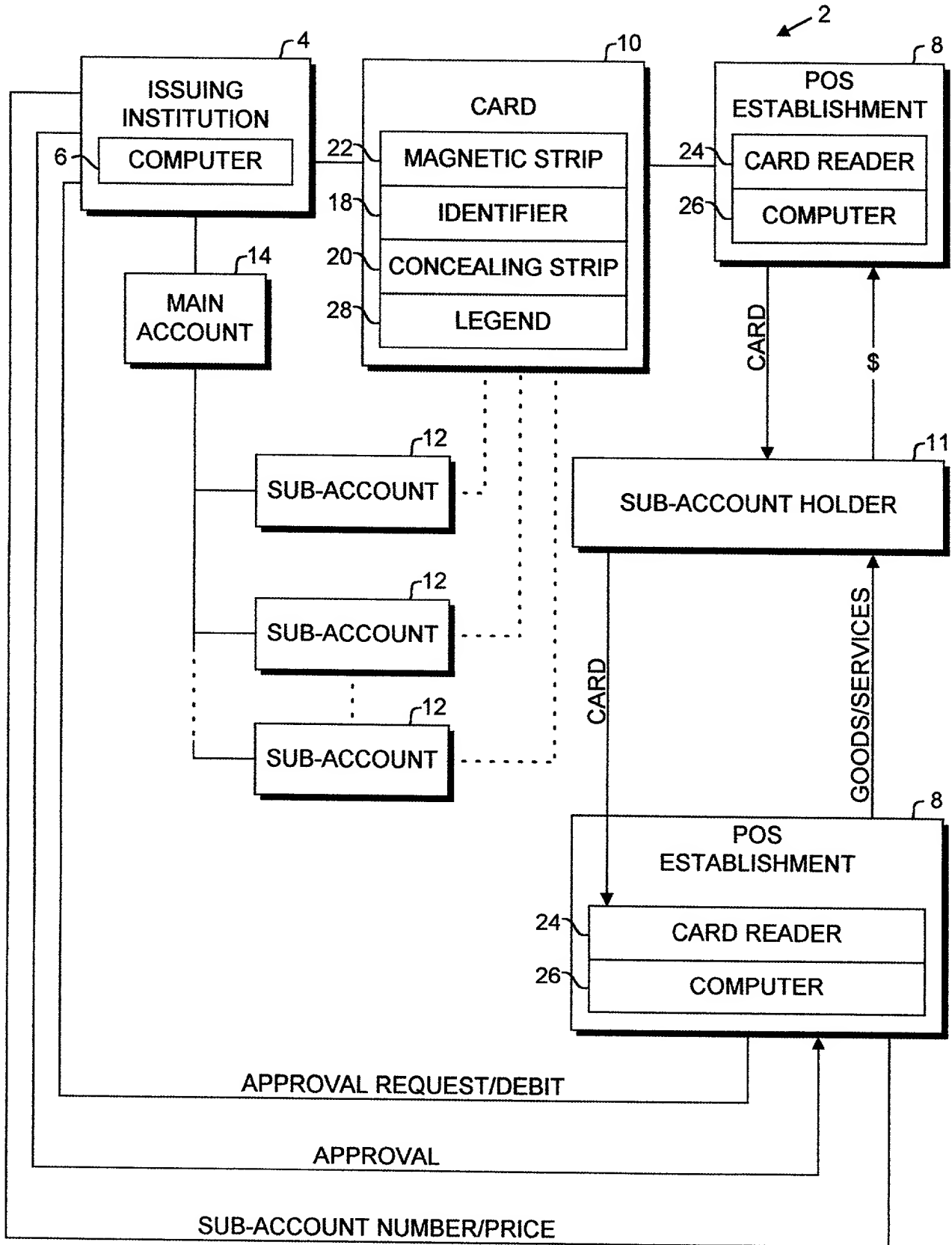
providing magnetic card readers at the point-of-sale establishments; and

reading the identifiers from the magnetic strips at the point-of-sale establishments with the card readers.

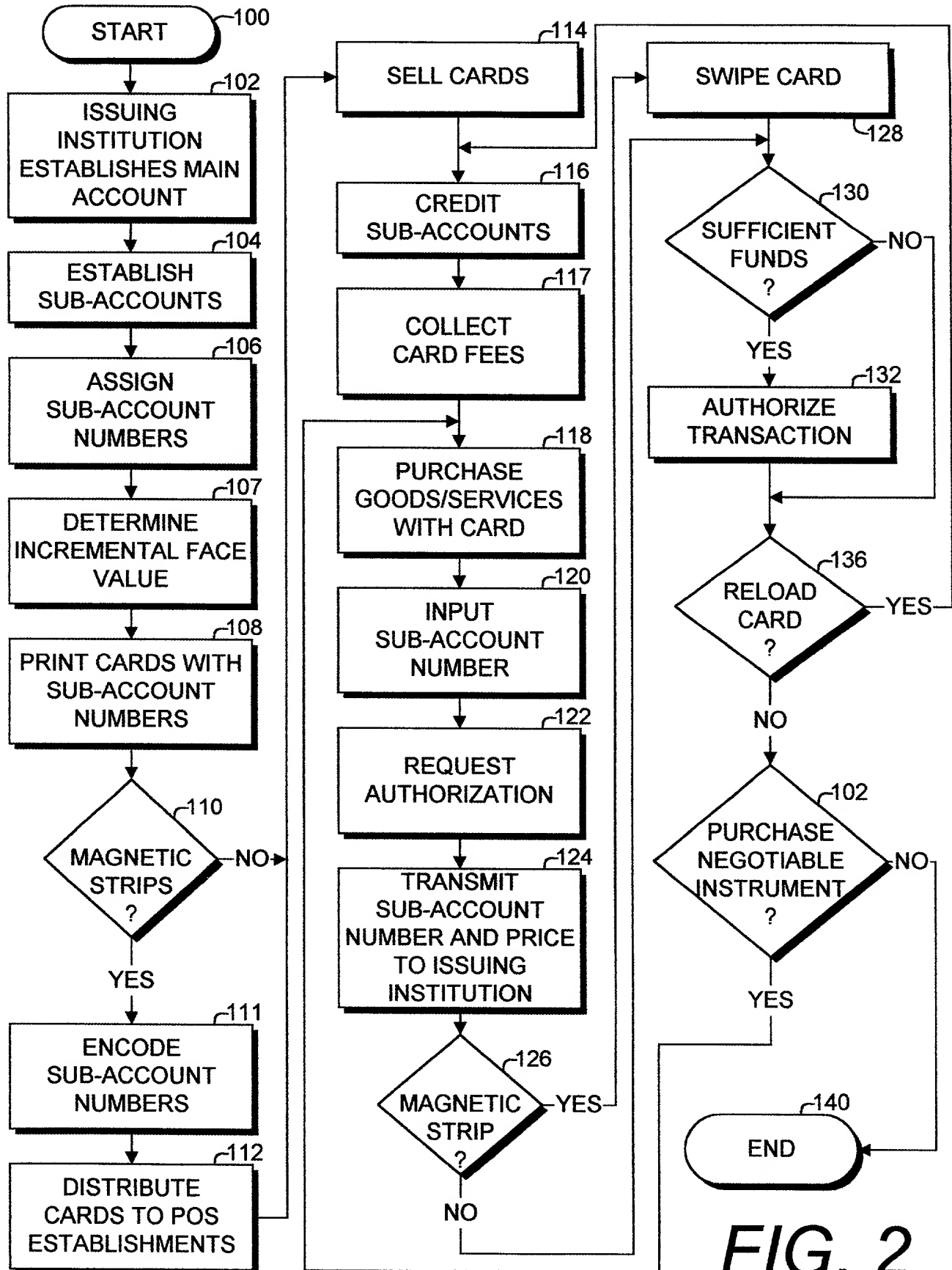
## **ABSTRACT OF THE DISCLOSURE**

### **RELOADABLE DEBIT CARD SYSTEM AND METHOD**

A reloadable debit card system includes an issuing institution whereat a main account is set up and multiple sub-accounts are established thereunder. Each sub-account corresponds to a respective cardholder. The sub-accounts are established and debit cards are printed with respective sub-account numbers prior to distributing the cards to an 80 POS distribution network. The cards are purchased from the POS member establishments for predetermined incremental values. Value can be added to such cards in such increments. A reloadable debit card method includes the steps of establishing a main account at an issuing institution and establishing sub-accounts thereunder. Multiple debit cards are printed with the respective sub-account numbers. The cards are then distributed to POS establishments for sale to cardholders, resulting in credits to the sub-accounts. Goods and services can be purchased with the cards whereupon the sub-accounts are debited. Negotiable instruments, such as money orders and the like, can optionally be purchased with the cards.



**FIG. 1**



**FIG. 2**

**DECLARATION AND POWER OF ATTORNEY  
FOR A PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **RELOADABLE DEBIT CARD SYSTEM AND METHOD**.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, Sec. 1.56. (Under Sec. 1.56 information is material to patentability when it is not cumulative to information already of record before the Patent and Trademark Office with respect to the present application and it establishes either by itself or in combination with other information a prima facie case of unpatentability of a claim or it refutes or is inconsistent with a position taken in opposing an argument of unpatentability relied upon by the Patent and Trademark Office or in asserting an argument of patentability. Under this section a prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.)

09713603 " 441600  
005114" E09ET 760

005111 "E09ET 250

I hereby state that I do not know and do not believe that the invention was ever known or used in the United States of America before my invention thereof; that to the best of my knowledge and belief the invention has not been in public use or on sale in the United States of America more than one year prior to this application, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, or patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application; and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns.

I hereby appoint Malcolm A. Litman, Reg. No. 19,579; Gerald M. Kraai, Reg. No. 34,854; Mark E. Brown, Reg. No. 30,361; Kent R. Erickson, Reg. No. 36,793; Mark L. Kleypas, Reg. No. 43,720; and Marcia J. Rodgers, Reg. No. 33,765 all members of the bar of the State of Missouri, whose postal address is Shughart, Thomson & Kilroy, P.C., Twelve Wyandotte Plaza, 120 West 12th Street, Kansas City, Missouri 64105, telephone (816) 421-3355 as my attorneys, with full power of substitution, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith in my behalf.

I hereby declare that all statements made herein of my own knowledge are true and that all

statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: \_\_\_\_\_

\_\_\_\_\_  
Adam Coyle

Residence: 7629 Nuthatch Circle  
Post Office  
Address: 7629 Nuthatch Circle  
Parker, CO 80134

Citizenship: United States of America